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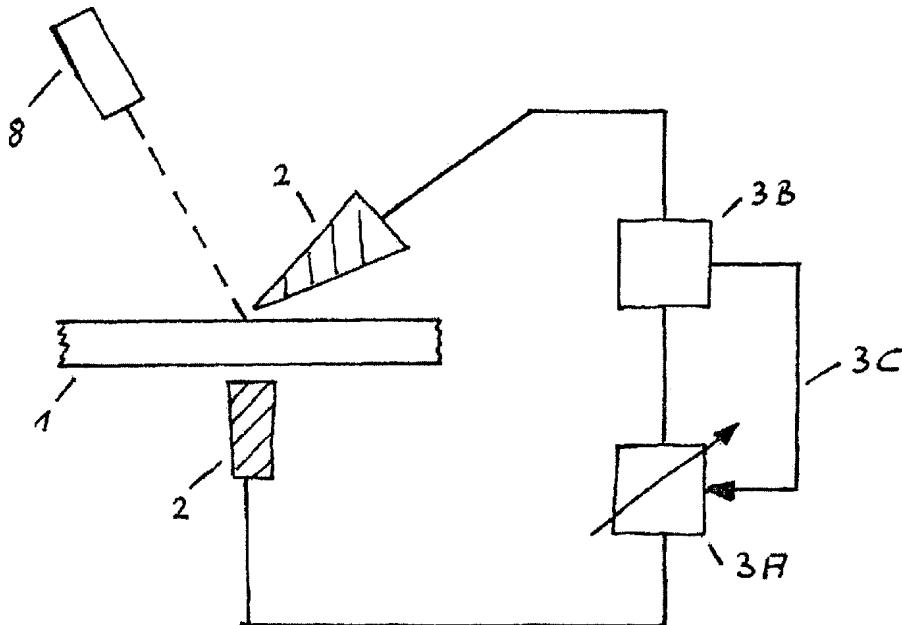
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(54) Title: MANUFACTURING AND USE OF MICROPERFORATED SUBSTRATES



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(57) Abstract: This invention relates to methods and devices for the production of micro-structured substrates and their application in natural sciences and technology, in particular in analysis and detection systems based on artificial and biological lipid membranes. The structure is preferably a hole or a cavity or channel and is obtained by spark perforation. Energy, preferably heat, is applied to the region to be structured so as to reduce the amplitude of voltage required and/or soften the material. The electrical parameters of the spark perforation are feedback-controlled.